

The song of presumed Prigogine's Nightjar *Caprimulgus prigoginei* and its possible occurrence in Lower Guinea

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A propos du chant du présumé Engoulevent de Prigogine *Caprimulgus prigoginei* et de sa présence en Basse Guinée. Un chant inconnu d'engoulevent forestier *Caprimulgus* sp. enregistré dans le massif de l'Itombwe (Congo-Kinshasa) et au Congo-Brazzaville appartient probablement à l'Engoulevent de Prigogine *C. prigoginei*. La silhouette et la taille des oiseaux vus au crépuscule correspondent à ce qu'on connaît de l'unique spécimen de cette espèce récolté dans l'Itombwe. L'espèce a été rencontrée plusieurs fois au nord du Congo-Brazzaville, au sud-est du Cameroun et probablement aussi au nord-est du Gabon. Le chant ressemble superficiellement à celui de l'Engoulevent à queue blanche *C. natalensis* mais s'en distingue par la structure des notes et la tonalité ; les cris sont courts et râpeux. Cet engoulevent préfère les forêts à voûte ouverte, de type semi-sempervirente à basse altitude, ou de type sempervirente en montagne. Il est certainement le plus rare des trois engoulevents forestiers d'Afrique Centrale.

Summary. An unknown song of a forest nightjar *Caprimulgus* sp. recorded in the Itombwe massif (Congo-Kinshasa) and in Congo-Brazzaville is probably of Prigogine's Nightjar *C. prigoginei*. The shape and size of birds seen at dusk correspond to what is known from the single specimen of this species collected in Itombwe. The species was encountered several times in northern Congo-Brazzaville, in south-east Cameroon and probably also in north-east Gabon. The song superficially resembles that of Swamp Nightjar *C. natalensis* but differs in the structure of the notes and the timbre; the calls are short and harsh. This nightjar prefers forest with a broken canopy. It is undoubtedly the rarest of the three forest nightjars in Central Africa.

In his recent review of 'lost', obscure and poorly known African bird species, Butchart (2007) briefly drew attention to the fact that Prigogine's or Itombwe Nightjar *Caprimulgus prigoginei* had possibly been encountered in several locations in Central Africa, far from the type locality of the single specimen in existence, a female collected in Itombwe in eastern Congo-Kinshasa in 1955 (Louette 1990). These observations are all based on the distinctive song of a small nightjar heard in several places in Congo-Brazzaville and adjacent Cameroon, seen at dusk a few times and tape-recorded by me in Nouabalé-Ndoki National Park (NP) in April 1996 and May 1997. By a strange coincidence, T. Butynski tape-recorded an identical song in the Itombwe forest in April 1996 (near Kilumbi Camp, at 03°52'S 28°56'E, to the south-east of the type locality). Butchart's note has prompted me to publish a more detailed description of this song supported by sonograms, together with notes on behaviour and habitat in Lower Guinea.

Observations in Lower Guinea

I first came across this mysterious nightjar in Odzala National Park (Congo-Brazzaville), when I heard it only once, just before dawn on 3 April 1994. The bird was singing in forest immediately in front of our bedroom, at 05.00 hrs: it gave a few bursts of song, with a series of *tsoc* notes, at a rate of about five per second, as written in my notebook. R. J. Dowsett and I were resident in Odzala NP for over a year, and as I never heard it again, this was presumably a wanderer looking for a new territory. The identity of the nightjar was not determined, and I later neglected to mention it in publications concerning Odzala (Dowsett-Lemaire 1997a, 2001, Dowsett-Lemaire & Dowsett 1998b). The song was reminiscent of that of Swamp Nightjar *C. natalensis*, a savanna species of extensive dry grassland, dambos or other wet grassland, which happened to be very common in the savannas of Odzala, but the timbre was noticeably different. The forest where it sang briefly was mostly evergreen and partially swampy, with a fairly closed but uneven canopy, along the Lékénié River. The altitude was c.400 m.

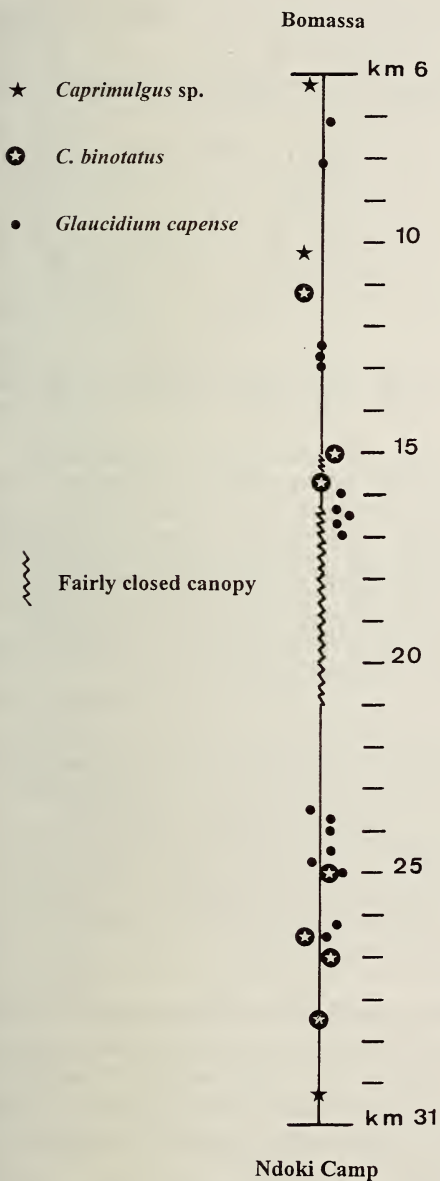


Figure 1. Location of calling Prigogine's Nightjar *Caprimulgus prigoginei* and of Brown Nightjar *Veles binotatus* along the track between Bomassa and Ndoki in Nouabalé-Ndoki National Park (map taken from Dowsett-Lemaire & Dowsett 1997).

Localisation des chanteurs du probable Engoulevent de Prigogine *Caprimulgus prigoginei* et de l'Engoulevent à deux taches *Veles binotatus* le long de la piste reliant Bomassa à Ndoki au Parc National de Nouabalé-Ndoki (carte tirée de Dowsett-Lemaire & Dowsett 1997).

The second time I encountered this nightjar was in semi-evergreen rain forest in Nouabalé-Ndoki NP, a few hundred metres from Ndoki

Camp, in April 1996 (Dowsett-Lemaire 1997b). The forest there has a naturally open canopy but is nevertheless very dense, with a closed, 20-m tall overstorey; emergents can reach 40 m. The altitude is c.350 m. One pair seemed to occupy a territory in that area: I heard and taped-recorded a bird that sang briefly at dusk on 4 April. The next evening, I searched for it at dusk (18.00 hrs) and as there was no sound, tape playback was tried and elicited a response: a bird sang for a few seconds then came close to me, crossed the narrow track and sang on the other side, perched in a tangle of lianas up a trunk at a height of c.20 m. It also gave a harsh, rolled call that I transcribed in French as *rèrèrè* (or *rek-kek-kek*). While it was thus calling, a second bird, presumably the mate, flew across the track then around me at a distance of 2 m. It appeared small and stocky, and in the dim light I could not see any pale patches on the wings or tail. I recorded more of the song on 5 April, a short series of staccato notes lasting 4–12 seconds; the bird was then singing in a dense patch of vegetation at a height of c.10 m, and no longer showed an interest in playback. The behaviour of the mate coming so close to me might suggest the pair was somewhat alarmed and possibly breeding. No bird was singing the next evening but I saw a small nightjar fly over the track. I moved to another camp the next day.

In late April–May 1997 I was back at Nouabalé-Ndoki with R. J. Dowsett, and the main reason for our visit was to try to catch this nightjar. The tape used for playback was in fact part of the recording obtained by T. Butynski, as there was less reverberation from vegetation on this one. As described in more detail in Dowsett-Lemaire & Dowsett (1998a) we searched systematically for nightjars in the second half of the night along 25 km of track, between Bomassa and Ndoki. In addition to seven Brown Nightjars *Veles binotatus*, we located three calling *Caprimulgus* sp., two of which were off track, in areas of very dense Marantaceae understorey (one was 6 km from Bomassa, the other 10 km: Fig. 1). The third was in exactly the same position as in 1996, near Ndoki Camp. It was considered the first two birds were inaccessible, and our best chance was to try to mist-net the territory holder near Ndoki. Nets were erected in two places close to the main songposts for four nights and displaced after the first two nights, between 12 and 18 May. To no

avail. The bird was considerably more vocal than in 1996 and its behaviour suggested it had lost its mate. It sang spontaneously for long periods at various high points in dense vegetation (estimated at 10–20 m) and also in the lower canopy of an *Austranella* emergent at a height of *c.*30 m. Playback of the Itombwe tape prompted it to sing louder and higher rather than come close to the tape—although it did once, flying nearby and giving some dry *rek, rek* calls before resuming the song from a perch. More recordings were obtained, and some song phrases lasted at least three minutes and ten seconds; the tempo was exactly 11 notes in ten seconds. Two of the three calling *Caprimulgus* sp. were 1.0–1.5 km distant from territories occupied by Brown Nightjar, the third was more isolated (Fig. 1). Part of the 1997 tape was published by Ranft & Cleere (1998).

Just before (re)visiting Nouabalé-Ndoki, in April 1997, R. J. Dowsett and I had spent 12 days exploring the Lobéké Faunal Reserve (now a national park) in adjacent south-east Cameroon. Of the four nights we spent at Boulou Camp, I came across the mystery nightjar once, on our first night there (21st): one sang *c.*1.2 km east of the camp, rather far away, just before 21.00 hrs. I called it up with the Itombwe tape, and it came much closer, singing for over 15 minutes at a height of 15–20 m in dense vegetation. It also called (the dry *rek, rek*), and eventually crossed the road, sang on the other side and then much further away. There was no sign of this bird on the following three nights, and it was perhaps (as in Odzala) a local wanderer. It was not found again on a second visit to Boulou on 16–19 April 1999, nor anywhere else in Lobéké in three visits (Dowsett-Lemaire & Dowsett 2000). The forest in Lobéké is semi-evergreen with a fairly open canopy, much as in Nouabalé-Ndoki.

During further surveys in south-east Cameroon in December 1997–January 1998 this nightjar was found at another two localities, in Nki Reserve and at Kupandaka in the Nki buffer zone (Dowsett-Lemaire & Dowsett 1998c). One sang very briefly on 26 December at Kupandaka at dusk, in slightly swampy forest on the edge of Kupandaka swamp. Another sang, also rather briefly, in dryland forest on the edge of Mala swamp in Nki on 4 and 6 January. In the latter area, the forest type is transitional between semi-evergreen and evergreen rain forest, with pockets

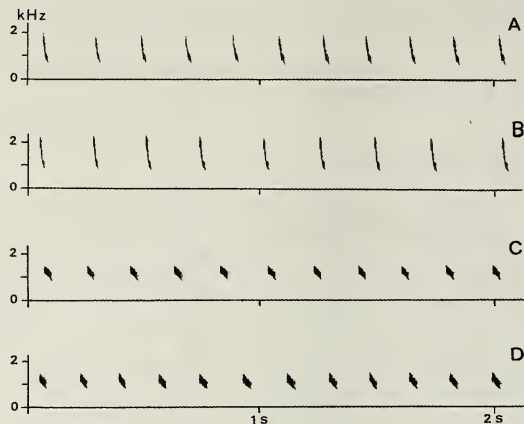


Figure 2. Sonograms illustrating the songs of Swamp Nightjar *Caprimulgus natalensis* (A from Zambia, in Stjernstedt 1986, and B from southern Congo-Brazzaville, recorded by FD-L) and presumed Prigogine's Nightjar *Caprimulgus prigoginei* (C from Nouabalé-Ndoki in Congo-Brazzaville recorded by FD-L, and D from Itombwe, eastern Congo-Kinshasa recorded by T. Butynski). Sonograms produced on a Kay Electric Sonagraph 7029A, using wide band filter.

Sonogrammes des chants de l'Engoulevent à queue blanche *Caprimulgus natalensis* (A provenant de Zambie, publié par Stjernstedt 1986, et B du sud du Congo-Brazzaville, enregistré par FD-L) et de l'Engoulevent présumé de Prigogine *Caprimulgus prigoginei* (C provenant de Nouabalé-Ndoki, Congo-Brazzaville, enregistré par FD-L et D provenant de l'Itombwe au Congo-Kinshasa oriental, enregistré par T. Butynski). Sonogrammes produits avec un spectrographe Kay Electric 7029A, en bande large.

of closed-canopy forest. Neither of these two birds reacted to playback; after the big rains ended in November, many species were just starting to call around Christmas. The altitude of the three records in south-east Cameroon is from 350 m (Nki) to 550 m (Lobéké).

One other potential locality for the presumed Prigogine's Nightjar in Central Africa is M'Passa in north-east Gabon, as already mentioned by Dowsett-Lemaire *in* Butchart (2007). That some bird(s) sang like Swamp Nightjar but in forest (where the latter is inherently unlikely) strongly suggests this species instead. This was in April–May 1985, close to the Ivindo River (Brosset & Erard 1986: 89); unfortunately, no tape-recording was obtained (C. Erard pers. comm.).

Overall, the months of vocal activity span the main dry season (from December) and start of the rains (in April–May) for the latitude of Nouabalé-

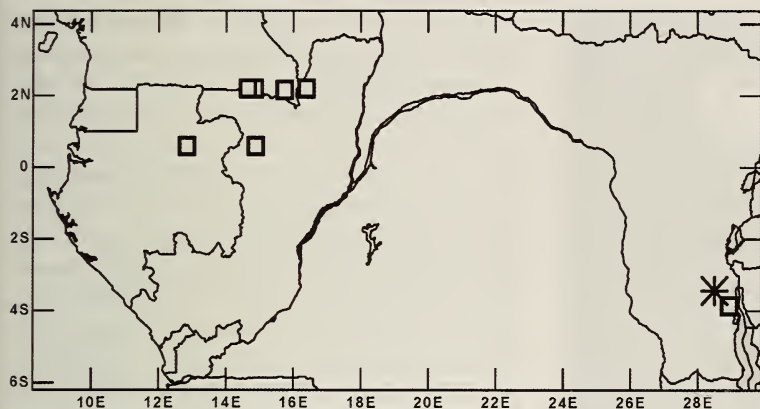


Figure 3. Map showing the probable distribution of Prigogine's Nightjar *Caprimulgus prigoginei* based on observations of singing birds (squares), and the site of the single specimen (star).

Carte montrant la distribution probable de l'Engoulevent de Prigogine *Caprimulgus prigoginei*, basée sur les observations de chanteurs (carrés), et le site de récolte de l'unique spécimen (étoile).

Ndoki and south-east Cameroon. In Odzala and M'Passa, the rainfall is bimodal, and the period March–May coincides with the short rains, following the hot dry season of December–February. Nightjars are expected to breed in the main dry season; the Brown Nightjar captured on 16 May 1997 at Ndoki was halfway through primary moult, albeit still very vocal.

The voice of presumed Prigogine's Nightjar

The first impression of anyone hearing this bird's song is how similar it sounds to the song of Swamp Nightjar. Indeed, when I first sent a copy of my tape from Congo-Brazzaville to C. Chappuis in 1996, he replied it had to be Swamp Nightjar. He was convinced otherwise only after I sent him the resulting sonograms. Fig. 2 shows the peculiarities of the two songs quite clearly. They have a similar temporal pattern, with five notes or slightly more per second, but the structure of the notes is very different. The *tjok tjok tjok* of Swamp Nightjar show a 'glissandi' with a sharp decrease in frequency whereas the notes of ?Prigogine's Nightjar are rather square, with only a moderate decrease in frequency. The resulting timbre is different, with ?Prigogine's sounding lower pitched and harder. The call notes of the two species are completely different, as those of ?Prigogine's are harsh and rolled, whilst those of Swamp Nightjar consist of a very distinctive melodious tremolo (Chappuis 2000). Swamp Nightjar is a bird of extensive grassland, wet or not, and avoids forest (there are no records from the Itombwe massif: Prigogine 1971). Thus anyone hearing a song resembling that of Swamp Nightjar but coming from dense forest should be on the alert.

Discussion

The tape from the Itombwe was obtained at an altitude of 1,860 m, from open-canopy forest on a hillside *c.*4 km from the nearest grassland; the bird was not seen (T. Butynski *in litt.* 1997). The type specimen came from an altitude of 1,280 m (Louette 1990). Incidentally, Burchart's (2007) mention of Curry-Lindahl (1960) in reference to the Itombwe specimen is not relevant, as this paper contains no information on Prigogine's specimen, nor to Bates's Nightjar *C. batesi* to which Prigogine (1971) had tentatively attributed it. The altitude of the birds encountered in Central Africa is of course much lower. If confirmed to refer to Prigogine's Nightjar, this would make it a Guineo-Congolian endemic rather than an Afromontane species (Fig. 3).

Comparisons of the tapes from Itombwe and Congo-Brazzaville show beyond doubt that we are dealing with the same nightjar, and what I saw of it a few times does not exclude Prigogine's Nightjar, based on size and silhouette. The size is comparable to that of Brown Nightjar, but the stocky appearance is due to a short tail, and indeed measurements of the female specimen of Prigogine's Nightjar reveal it to be the shortest-tailed nightjar in Africa (Louette 1990). An alternative possibility is that of a completely new species of nightjar, but this seems less likely.

The habitat preferred by this nightjar in Central Africa is semi-evergreen rain forest with a broken canopy, and a broken canopy is also characteristic of forest on slopes of hills and massifs (as in the Itombwe). The link between the Itombwe and the semi-evergreen forest block around the Congo-Cameroon border is via the northern edge

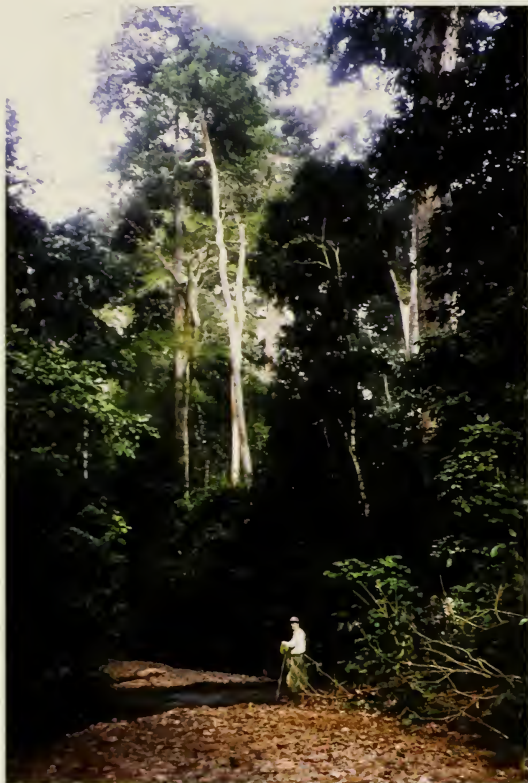


Figure 4. Tall forest in Nki Reserve near Mala bai, where all three forest nightjars occurred: Bates's *Caprimulgus batesi*, Brown *Veles binotatus* and ?Prigogine's *C. prigoginei* (Françoise Dowsett-Lemaire)

Forêt de la réserve de Nki près de Mala bai, où les trois engoulevents forestiers se côtoyaient : Engoulevent de Bates *Caprimulgus batesi*, Engoulevent à deux tâches *Veles binotatus* et ?Engoulevent de Prigogine *C. prigoginei* (Françoise Dowsett-Lemaire)

of the Guineo-Congolian region, through the southern Central African Republic and northern Congo-Kinshasa (*cf.* the vegetation map of White 1983). This area remains unsurprisingly very poorly documented. The distribution of Barred Owlet *Glaucidium capense* in Central Africa also seems to follow the same pattern, from the little we know of its presence and habitat preferences for open-canopy forest in Congo-Brazzaville, south-east Cameroon, the southern Central African Republic and eastern Congo-Kinshasa. The form later named *albertinum* was originally treated as *castaneum* (Prigogine 1971, 1985) and the geographical limits between the former (high altitude in the Albertine Rift) and the latter (low altitude) remain to be investigated.

Jackson (2002a, 2002b) classified African nightjars of the genus *Caprimulgus* into two broad categories, 'whistlers' and 'churrers', and found an apparent correlation between the 'whistling' nightjars and a more pronounced emargination of the ninth primary. Overall, 'whistling' nightjars inhabit more densely vegetated environments than 'churrers' (where their songs would carry better through dense vegetation), and a more pronounced emargination of P9 is considered to give them an advantage at take-off in forested areas (Jackson 2002a). Since Prigogine's Nightjar has, in all likelihood, a churring song, it is abnormal in having developed this type of song in forest and in having also reduced P9 emargination (as in savanna nightjars). But the square-shaped structure of the *tchoc* note is sufficiently different from that of all savanna churring nightjars (a thin vertical bar, slightly down-curved in Swamp Nightjar) that one may assume it is adapted to a forest environment. Nevertheless, the reason why Prigogine's Nightjar should have reduced P9 emargination when it lives in the same type of forest as Brown Nightjar (which has the highest percentage of P9 emargination, Jackson 2002a: 70) remains unexplained—or else the hypothesis of Jackson and others about the relevance of this emargination might not be valid.

This mystery nightjar appears to be much the scarcest of the three forest species present in Congo-Brazzaville and Cameroon, Bates's Nightjar being locally common in some types of swamp forest (e.g. in southern Congo-Brazzaville: Dowsett-Lemaire & Dowsett 1991) whilst Brown Nightjar is less uncommon than ?Prigogine's in dryland forest (Dowsett-Lemaire & Dowsett 2008). Two of the few birds I heard did not settle where they sang and appeared to be mere wanderers. It seems the best place to pursue research on this species is the track from Bomassa to Ndoki, as it gives at least a stretch of 25 km (31 km altogether, but the vegetation along the first 6 km near Bomassa is too secondary). The behaviour of the pair near Ndoki Camp in 1996 (flying low etc.) shows that it should be possible to mist-net one with tape playback. But a poorly settled bird or an unmated individual is infinitely more difficult to attract at close range. We never had a chance to return to Nouabalé-Ndoki, but I would encourage anyone with the time and interest to visit the area, one of the wildest places left in Central Africa. Another

area worthy of more attention and visited by many birders is, of course, the M'Passa forest of Gabon. The best months would seem to be January–April, as by May–June breeding may come to an end.

Acknowledgements

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Appendix. Gazetteer of localities Annexe. Liste des localités citées

Boulou camp, Lobéké, Cameroon	02°09'N 15°44'E
Itombwe (specimen), Congo-Kinshasa	03°26'S 28°30'E
Itombwe (tape-recording), Congo-Kinshasa	03°52'S 28°56'E
Kupandaka, Cameroon	02°12'N 14°51'E
Mala bai, Nki, Cameroon	02°12'N 14°39'E
M'Passa, Gabon	00°35'N 12°50'E
Ndoki camp, Nouabalé-Ndoki, Congo-Brazzaville	02°12'N 16°23'E
Odzala (Mboko camp), Congo-Brazzaville	00°35'N 14°53'E